Arizona Digital Connections Summit 2012

Broadband and Public Safety
Saving Lives and Property

Digital Arizona Council & Arizona Enterprise Technology Office

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Public Safety Interoperable
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Outline

I) Introduction
- The majority of information sharing is by voice through Land Mobile Radio
- Information in the form of data, diagrams, pictures, video and M2M is coming
- FirstNet & the NPSBN – the national scene

II) Where we are now…
- Rural – voice only
- 9600 baud modem-like access to Computer Aided Dispatch (CAD) & some MVD/DOJ information
- 3G/WiFi air-cards in use allow access to more MVD/DOJ data, mug-shots, etc. but not video
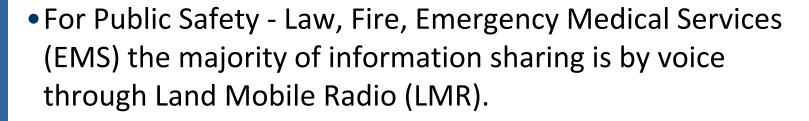
III) Where we are going…
- Data, blueprints, live video, biometrics, Radio Frequency Identification (RFID)
- A possible future for fighting wildfires

IV) Planning & Timeline
- How we're approaching the process, Education and Outreach plan, multidisciplinary approach, Local requirements gathering, etc.

V) Discussion

Introduction

- For Public Safety - Law, Fire, Emergency Medical Services (EMS) the majority of information sharing is by voice through Land Mobile Radio (LMR).

- Information in the form of data - diagrams, pictures, video, direct database queries, and machine to machine (M2M) is here but not in the way TV shows would lead one to believe.

- I-phones and Smart phones have more capability than public safety communications, however, what they don't have is the coverage, reliability and security experienced by public safety LMR.

Introduction (cont.)

On February 22, 2012, Public Law 112-90 was signed. Key features of the legislation include:
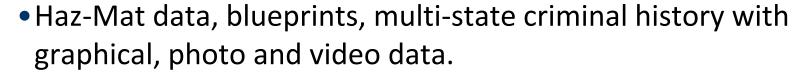
- Allocates the "D-Block" spectrum to Public Safety.

- Forms First Responder Network Authority (FirstNet)
  - Responsible for build out and maintenance of a national NPSBN
  - Responsible for working with local jurisdictions to define boundaries, roles and responsibilities

- Provides funding to both perform the upfront requirements gathering ($135M – State and Local Implementation Grant Program (SLIGP)) and the design/build of the overall Nation-wide Network ($7B).

- Establishes a Fee-based model and allows Public/Private Partnerships.

Where we are now…

- Rural – for the most part voice only, MVD checks via voice.

- Some date systems at 9.6/14.4KB baud modem-like access to Computer Aided Dispatch (CAD) information. Text updates to mobile computer terminals and can barely provide photos.

- A blend of air-cards, WiFi and MiFi are in use which allow access to business functions and low-volume data applications such as MVD photo, mug-shots, etc.

- However, bandwidth hungry data such as mapping, navigation, and premise information is stored locally on the devices.

- Not much in the way of live video being used.

Where we are going…

- Haz-Mat data, blueprints, multi-state criminal history with graphical, photo and video data.

- Live video streaming, real time 3D personnel location, accountability, biometrics and Radio Frequency Identification (RFID).

- Real-time specialist teaming on-line (physician, cardiac, etc.), real-time diagnostics, interpretation and stabilization en-route.

- One possible wildfire scenario - Precision Information Environments (link).

Planning & Timeline

- State and Local Implementation Grant Program ($135M)

- The grant guidance indicates the State is responsible for Education, Outreach and Planning.

- Arizona is focusing on fiber where there is no fiber.

- Digital highways (S.B. 1402), road segments, and anchor points.

- Local requirements, real versus projected coverage, participant pool and critical infrastructure.

- Special situations: 5 million visitors annually & several hundred thousand annually.

Timeline (cont.)

- Q1 2013 – SLIGP grant process opens.

- Q2 2013 – Arizona submits a SLIGP grant request to NTIA for the Arizona education, outreach and planning process.

- Q3 2013 – Best guess estimate for SLIGP grant awards.

- Q3 2013 – Funded education, outreach and planning begin.

- The next phases of data collection, infrastructure inventory and Public/private partnership development is indeterminate at this time.

Questions/Comments

Thank you

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